### I. SCOPE OF WORK

### A. DEFINITIONS:

For the purposes of this solicitation the following terms and definitions shall apply:

- 1. <u>Active Corrective Action</u>: The scope of work to be implemented under this solicitation as defined in the Technical Specification Package (Section I.A.15).
- 2. <u>Area of Concern</u>: The horizontal and vertical area, identified in the Appendix, in which concentrations of petroleum chemicals of concern have been quantified and/or can be relatively determined by actual data and subsequent interpretation using accepted scientific principles.
- 3. ACQAP: Annual Contractor Quality Assurance Plan
- 4. <u>Catastrophic Occurrence</u>: An event (e.g., hurricane) that results in a declared state of emergency and directly and substantially affects the Site Rehabilitation Contractor's operations at a site.
- 5. <u>Chemicals of Concern (CoC)</u>: Specific petroleum constituents that are identified for monitoring and corrective action.
- 6. Corrective Action Completion Time (CACT): The time in months, submitted by the Site Rehabilitation Contractor, and acceptable to the South Carolina Department of Health and Environmental Control(DHEC), necessary to reduce Free Phase Product (FPP) thicknesses to at or below 0.01'and CoC concentrations to below site-specific target levels (SSTLs), verify attainment of all payment milestones as set forth in Section II.A.9, and remove and/or properly abandon assessment and corrective action components (wells, treatment lines, etc.) as determined by DHEC. All activities must be completed within 5 years of the Financial Approval Date. Any request for an extension beyond the 5-year time frame must be made in writing by the Owner/Operator and the Corrective Action Completion Time may be extended with a written no cost extension granted by DHEC.
- 7. <u>Corrective Action Cost</u>: The total amount established via the procurement process to complete the scope of work/specifications detailed in the solicitation unless otherwise modified pursuant to the terms of this solicitation.
- 8. <u>Corrective Action Plan (CAP)</u>: A document submitted by the Site Rehabilitation Contractor that outlines and details proposed corrective action(s) and contains a timetable consistent with the CACT, to include any subsequent CAP addendums or amendments.
- 9. <u>Corrective Action Plan Implementation Date</u>: The date on which the Contractor initiates corrective action (i.e., physical treatment activities such as excavation, extraction, injection, etc.) under the approved CAP. The date must be within 30 days of receipt of a Notice to Proceed issued by DHEC.
- 10. <u>Day</u>: For the purpose of this solicitation, any reference to day(s) will be intended as calendar day(s) and not business day(s).
- 11. <u>Free-Phase Product (FPP)</u>: Petroleum lighter than water non-aqueous phase liquid (LNAPL) identified for monitoring and corrective action.

- 12. Payment Milestone: Milestones set forth in Section II.A.9 of this solicitation for which the Site Rehabilitation Contractor will receive payment under the Technical Specifications Package based on achieving the SSTLs identified in the appendix.
- 13. Quality Assurance Program Plan for the Underground Storage Tank Management Division (UST QAPP): The UST QAPP Revision under implementation at the time this solicitation is posted.
- 14. Site Incentive Period: The period of time in months established by DHEC during which the payment milestones as set forth in Section II.A.9 must be achieved (see Section II.B.3.) in order to qualify for the Early Completion Incentive.
- 15. <u>Technical Specifications Package</u>: This solicitation document, to include the attached Appendix, which provides site-specific information and defines the scope of work to be completed at the site(s) under this solicitation.

### **B. SOLICITATION STATEMENT**

The Underground Storage Tank (UST) Management Division of DHEC is seeking services on behalf of JPS Corner Stop Inc. to perform active corrective action of a petroleum release or petroleum releases at a regulated underground storage tank site in accordance with the payment milestones as set forth in Section II.A.9. The objectives are to prevent significant further migration of FPP and CoC, to remove measurable (>0.01') thicknesses of FPP, and to reduce CoC concentrations to or below SSTLs established by DHEC. All Applicants must be SCDHEC-certified Class I Site Rehabilitation Contractors and must remain in compliance with R.61-98 for the duration of the CACT.

### C. SCHEDULE OF DELIVERABLES

The following table summarizes the deadlines for deliverables associated with this solicitation:

# Please note that DHEC must be notified 15 calendar days prior to any activities to be conducted at the site.

DELIVERABLE DUE	DEADLINE
Questions	By 5:00 pm on May 29, 2019
Financial Approval Form	By 5:00 pm on June 17, 2019 in sealed envelope
UST QAPP Contractor Addendum or Site-	Within 15 days from receipt of the Financial Approval
Specific Work Plan for Initial Monitoring Report	Letter.
Initial Monitoring Report	Within 45 days from approval of UST QAPP Contractor Addendum or Site-Specific Work Plan for Initial Monitoring Report
CAP and UST QAPP Contractor Addendum or	Within 30 days of receipt of Notice to Proceed from
Site-Specific Work Plan for Corrective Action	DHEC for CAP Preparation
CAP Implementation	Within 30 days of receipt of Notice to Proceed from DHEC for CAP Implementation
CAP Implementation Report	Within 60 days of receipt of Notice to Proceed from DHEC for CAP Implementation
Corrective Action System Evaluation (CASE) Report	Semi-annually with initial sampling to occur 90 days after CAP Implementation and report due within 30 days of sampling.

Update UST QAPP Contractor Addendum or	First quarter of each year and as needed until
Site-Specific Work Plan for Corrective Action	completion of corrective action.
Domokilization and Site Bootswation	Mishing CO days of married of Nicking As Durand form
Demobilization and Site Restoration	Within 60 days of receipt of Notice to Proceed from
×	DHEC for Demobilization and Site Restoration.

### D. SITE SPECIFIC INFORMATION

The scope of work defined in this solicitation is to be implemented at Corner Stop 5, 500 N Logan St., Gaffney, SC 29341, UST Permit 11894 for the release(s) reported on January 10, 2010. A copy of the technical file will be available on-line at <a href="https://scdhec.gov/environment/land-management/underground-storage-tanks/release-assessment-clean/active-corrective-0">https://scdhec.gov/environment/land-management/underground-storage-tanks/release-assessment-clean/active-corrective-0</a> until the CAP is approved. The technical file may also be reviewed at the Freedom of Information (FOI) Office located at the Sims/Aycock Building, 2600 Bull Street, Columbia, SC, 29201 (803-898-3882). Appointment(s) to view the technical file may be scheduled on weekdays between the hours of 8:30 A.M. to 5:00 P.M. by calling the FOI Office at 803-898-3882. A brief technical summary, including maps and data tables, is attached in the Appendix. UST Site Rehabilitation Contractors are strongly encouraged to review the file(s) to ensure a complete understanding of corrective action requirements. DHEC will presume, upon submittal of an offer, that the UST Site Rehabilitation Contractor has reviewed and understands all available information in the technical file.

### II. SOLICITATION REQUIREMENTS

### A. GENERAL REQUIREMENTS

- 1. PAYMENT PERIOD: The payment period will be effective from the date of financial approval until corrective action is complete as outlined in this solicitation.
- 2. EQUAL OPPORTUNITY EMPLOYMENT: Site Rehabilitation Contractors must agree to make positive efforts to employ women, minorities, and minority-owned businesses.
- 3. AMENDMENTS: All amendments to this solicitation shall be in writing from DHEC. DHEC shall not be legally bound by any amendment, interpretation or settlement that is not in writing.
- 4. RESTRICTION: the only official contact person at DHEC during the solicitation and financial approval process is Debra Thoma. Site Rehabilitation Contractors are not to contact any other DHEC personnel or other contractors.
- 5. FINANCIAL APPROVAL: The UST Owner/Operator has the right to select a SCDHEC-certified Class I Site Rehabilitation Contractor to perform corrective action in accordance with the SUPERB Act (S.C. Code Ann. §§ 44-2-10 et seq.) and is not limited to Site Rehabilitation Contractors who respond to this solicitation. Therefore, financial approval may be made to a Site Rehabilitation Contractor who has been selected by the Owner/Operator but has not responded to this solicitation. The financial approval will be for the reasonable cost as defined in Section II.A.6. The selected Site Rehabilitation Contractor must agree to make positive efforts to employ women, minorities, and minority-owned businesses. Pursuant to S.C. Code Ann. § 44-2-120(B), the Owner/Operator is ultimately responsible to DHEC for the actions of their selected Site Rehabilitation Contractor.

  Therefore, DHEC will pursue enforcement actions against the Owner/Operator if their selected Site Rehabilitation Contractor does not make satisfactory progress towards achieving the payment milestones as outlined in Section II.A.9.

- 6. REASONABLE COST: The lowest corrective action cost submitted in response to the solicitation will determine the reasonable or SUPERB-allowable cost to complete corrective action as defined by the solicitation. DHEC reserves the right to reject any and all submitted Financial Approval Forms that propose Corrective Action Costs that are not advantageous to the State of South Carolina, that propose a CACT that is not protective of public health and the environment, and that propose remediation technology(ies) or method(s) that cannot be permitted in the State of South Carolina and/or that are not protective of public health and the environment.
- 7. SITE WORK VERIFICATION: The Site Rehabilitation Contractor will be required to treat the area of concern as defined in Section I.A.2 and as shown in the Appendix (Figure 2). Verification that FPP removal and interim payment milestones have been achieved will be based upon gauging/sampling results from the SSTL wells and sampling points listed in the Appendix, and extraction wells installed as part of corrective action. Verification that the final payment milestone has been achieved will be based upon sampling results from all wells and gauging points listed in the Appendix and all verification wells to be installed at locations and depths designated by DHEC (see Section III.B.11 for more details). It is understood that seasonal fluctuations in FPP thicknesses and CoC concentrations will occur. It is the intent of this corrective action to prevent further degradation of the aquifer(s) by continued migration of FPP and/or CoC into areas not previously impacted. If the corrective action allows FPP and/or CoC to migrate into areas not previously impacted, the Site Rehabilitation Contractor will be responsible for completing assessment activities necessary to re-define the impacted areas and for providing amendments to their CAP to address the additional impact.
- 8. REPORTS: Reports are to be submitted to DHEC on or prior to the established due dates unless otherwise approved in writing by DHEC. Deliver one paper copy and one electronic copy of each plan and report to: SCDHEC, Bureau of Land and Waste Management, UST Management Division 2600 Bull Street, Columbia, SC 29201. The electronic copy should be submitted on compact disk (CD) in Personal Data Format (PDF). All data tables should be in MS Excel or comparable format. One copy of each plan or report must be delivered to each party listed on the Distribution List included in the Appendix. The distribution copies may be electronic or paper as agreed upon by the party and the Site Rehabilitation Contractor. Based on permitting and other requirements, additional copies of plans and reports may be required by DHEC. DHEC will notify the Owner/Operator of the exact number of copies of each document to be submitted.
- 9. INVOICING: Invoices will be submitted to SCDHEC, Bureau of Land and Waste Management, UST Management Division, ATTN: Financial Section, 2600 Bull Street, Columbia, SC 29201, using the Corrective Action Invoice form. The initial invoice must be received at the above address within 4 months of CAP approval or funds will be uncommitted as required by S.C. Code Ann. § 44-2-40(B). If funds are uncommitted, the invoice will be held until funds become available. Payment will only be made for achieving the payment milestones as specified in Section II.A.9. No partial payments will be made, except as outlined in Section III.B.4. Payment be made on a pay-for-performance basis as follows:
  - a. Payment of 35% of the Corrective Action Cost will be made within 90 days following DHEC's receipt of an invoice and documentation that the Site Rehabilitation Contractor has completed the CAP implementation. All corrective action activities must be as described in the CAP and are subject to the limitations of S.C. Code Ann. § 44-2-40. The implementation should be documented in the CAP Implementation Report. The CAP Implementation Report must include the construction logs for all injection and/or extraction wells installed in accordance with the CAP.

- b. Payment of 65% of the Corrective Action Cost will be made based on achieving interim and final payment milestones as verified in the SSTL wells and sampling points listed in the Appendix, and in all extraction wells, and in all verification wells. Payments will be made upon DHEC's receipt of invoices and documentation that the Site Rehabilitation Contractor has achieved the interim and final payment milestones of FPP removal 60%, 90%, and 100% reduction of the total CoC concentrations above the SSTLs by the implementation of corrective action as outlined in the CAP and including any subsequent CAP addendums or amendments. CoC concentrations and SSTLs are listed in the Appendix.
  - 1) The FPP removal payment milestone will be achieved when the FPP thickness does not exceed 0.01 in all SSTL wells and sampling points listed in the Appendix, and in all extraction wells. Payment of 10% of the Corrective Action Cost will be made upon verification (see Section III.B.11 for the method of verification) that measurable (>.01') FPP has been removed. Achievement of this payment milestone must be verified by gauging conducted by DHEC.
  - 2) The first interim concentration reduction payment milestone will be achieved when 60% of the total CoC concentration above SSTLs in the SSTL wells and sampling points listed in the Appendix is removed. The formula listed in the site rehabilitation section of the UST QAPP will be used to calculate the percent total concentration reduction. Payment of 10% of the Corrective Action Cost will be made upon confirmation by Corrective Action System Evaluation report or upon verification (see Section III.B.11 for the method of verification) that at least 60% of the total CoC concentration above SSTLs has been removed.
  - 3) The second interim concentration reduction payment milestone will be achieved when 90% of the total CoC concentration above SSTLs in the SSTL wells and sampling points listed in the Appendix is removed. The formula listed in the site rehabilitation section of the UST QAPP will be used to calculate the percent total concentration reduction. Payment of 10% of the Corrective Action Cost will be made upon verification (see Section III.B.11 for the method of verification) that at least 90% of the total CoC concentration above SSTLs has been removed. Achievement of this payment milestone must be verified in accordance with Section III.B.11.
  - 4) The final payment milestone will be achieved when 100% of the total CoC concentration above the SSTLs (at the time the bid is posted) in the SSTL wells and sampling points listed in the Appendix has been verified to have been removed in accordance with Section III.B.11 AND Site Restoration has been completed in accordance with Section III.B.12-14. Payment for the 100% removal of CoC above SSTLs and for Site Restoration will be made concurrently, ONLY when both have been achieved, and in accordance with the following conditions:
    - a. 30% of the total Corrective Action Cost is allocated for achievement of 100% CoC concentration removal above SSTLs. 100% removal of CoC concentrations above SSTLs must be verified (during the second 100% verification quarter) in accordance with III.B.11 following two consecutive quarters with all corrective action activities completely ceased in order for DHEC to issue a written Notice to Proceed for site restoration. CoC concentrations must not exceed SSTLs in all wells and sampling points listed in the Appendix, in all verification wells, and at any point in the area of concern.
    - b. 5% of the Corrective Action Cost is allocated for site restoration and will be paid upon

DHEC's receipt of an invoice, verification in accordance with Section III.B.11 that 100% of COC concentrations above SSTLs have been removed (30% of Corrective Action Cost), and verification, by a final inspection by DHEC, that all assessment and corrective action components (e.g., piping, wells, trenches, etc.) have been removed from the site or properly abandoned (see Section III.B.11-14 for more details), and the facility and associated adjacent properties have been restored to the condition that existed prior to assessment and corrective action (Section III.B.13) (5% of Corrective Action Cost). Site restoration must be completed within 60 days from receipt of a Notice to Proceed from DHEC confirming that 100% CoC concentration above the SSTLs is verified to have been removed and site restoration may proceed.

- REVISION OF SSTLS: SSTLs listed in the Appendix/Appendices have been established based on site conditions and existing receptors at the time of Technical Specification Package solicitation. DHEC reserves the right to revise the SSTLs (in effect reducing the work scope) at any time during the CACT if deemed appropriate as long as SSTLs do not become more stringent. Revision of SSTLs does not constitute modification of this Technical Specification Package. Revision of SSTLs may result in cancellation of this Active Corrective Action in accordance with Section II.A.11. If revision of SSTLs results in Active Corrective Action cancellation, payment will be reduced in accordance with the actual CoC mass reduction percentage achieved when compared to the SSTLs at the time this solicitation was posted. If 100% of the revised SSTLs have been achieved, and site restoration is completed, 5% of the total corrective action cost will be paid. This final 5% of the Corrective Action Cost will be paid upon DHEC's receipt of an invoice, and verification in accordance with Section III.B.11, that 100% CoC mass reduction when compared to the revised SSTLs has been achieved, and by a final inspection by DHEC, that all assessment and corrective action components (e.g., piping, wells, trenches, etc.) have been removed from the site or properly abandoned (see Sections III.B.12-14 for more details), and the facility and associated adjacent properties have been restored to the condition that existed prior to assessment and corrective action (Section III.B.13). Site restoration must be completed within 60 days from receipt of a Notice to Proceed from DHEC confirming that 100% reduction of CoC mass when compared to the revised SSTLs has been achieved and site restoration may proceed.
- 11. LIMITATIONS: The approved Corrective Action Cost will be final and will not be increased for any reason (e.g., unanticipated iron fouling of a system, wells clogging because of biological activity or sediments, damage by lightning, increased subcontractor costs, loss of utilities, modification to the system to meet the payment milestones, etc.) with the exception of: 1) unforeseen subsurface conditions as determined solely at the discretion of DHEC or 2) identification of additional FPP or CoC from a confirmed release that occurs subsequent to financial approval and that adversely impacts corrective action as determined by DHEC. Payment will only be made for achieving the payment milestones as set forth in Section II.A.9. No interim or partial payments will be made once corrective action is initiated, except as outlined in Section III.B.4. Once Active Corrective Action has been initiated, and in the event of a cancellation due to any of the conditions described in this Section, final payment, if appropriate, will be a percentage of the Corrective Action Cost as determined by DHEC. The percentage of the Corrective Action Cost will be reduced in accordance with the actual percent total CoC concentration reduction when compared to the SSTLs at the time the solicitation is posted, based upon last sampling results, as verified by DHEC in accordance with Section III.B.11, from all wells and sampling points listed in the Appendix and all verification wells, less the amount previously paid. Contractor-owned items used on-site for the corrective action that are damaged or destroyed by acts of nature, improper maintenance or handling, theft or vandalism will not be replaced or reimbursed by the SUPERB Account. The Site Rehabilitation

Contractor cannot delay progress or suspend corrective action activities at the site without written approval from DHEC based upon a claim of a suspected new petroleum release from the UST system. Unless directed otherwise by DHEC, the Site Rehabilitation Contractor must continue to perform corrective action activities under this solicitation during any period of time during which a new petroleum release from the UST system is being investigated. The Site Rehabilitation Contractor must clearly demonstrate sufficient evidence of the release in the form of analytical test results or other demonstrative evidence to DHEC. The determination that a new petroleum release from the UST system has occurred that post-dates the financial approval, and that adversely impacts corrective action at the site, is in the sole discretion of DHEC. In the event that all payment milestones are not achieved within the CACT stated in Section IV.B.4 this Active Corrective Action may be cancelled, and the Owner/Operator will be held to the requirements in Section II.A.5.

12. PERIODIC MEETINGS: DHEC may require periodic meetings, as necessary, with the selected Site Rehabilitation Contractor via teleconference, at DHEC, or at the site to verify progress of the Corrective Action.

### **B. SPECIFIC REQUIREMENTS**

- SCOPE OF SOLICITATION: This solicitation is for corrective action at one site in South Carolina.
  - a. The CACT for the site shall be entered on the Financial Approval Form in Section IV.B.
    - Time is of the essence in completing the site work to restore the aquifer and protect human health and the environment. Therefore, the UST Site Rehabilitation Contractor is encouraged to strive for efficient corrective action methods and to propose the shortest practical completion time for the site.
    - 2) The UST Site Rehabilitation Contractor shall enter the number of months in the space provided for the site in Section IV.B
- 2. INQUIRIES: A copy of the technical file will be available on-line at <a href="https://scdhec.gov/environment/land-management/underground-storage-tanks/release-assessment-clean/active-corrective-0">https://scdhec.gov/environment/land-management/underground-storage-tanks/release-assessment-clean/active-corrective-0</a> until the CAP is approved. The technical file may also be reviewed at the FOI Office located at the Sims/Aycock Building, 2600 Bull Street, Columbia, SC 29201 (803-898-3882). All questions or requests for information must be submitted in writing to Debra Thoma, Email to <a href="mailto:thomadl@dhec.sc.gov">thomadl@dhec.sc.gov</a> or FAX to (803) 898-0673, in accordance with the date specified in Section I.C. After this date, no further questions or requests for information will be addressed. A written response will be provided.
- 3. PROVISION FOR EARLY COMPLETION INCENTIVE: DHEC will pay the Site Rehabilitation Contractor an incentive of 10% of the Corrective Action Cost for early completion, subject <u>solely</u> to the conditions set forth in this provision. Payment will be made if the payment milestones have been met in accordance with the terms and conditions of this solicitation prior to the end of the Site Incentive Period, as established by DHEC and verified in accordance with Section III.B.11.

The Site Incentive Period will commence on the CAP Implementation Date. A month starts at 00:00:00 hours on the CAP Implementation Date and ends at 23:59:59 hours preceding the same day of the following month. Months will be counted consecutively from the CAP Implementation Date.

Following implementation, DHEC will notify the Owner/Operator in writing of the closing date of the Site Incentive Period.

The Site Incentive Period will not be adjusted for any reason, cause, or circumstance whatsoever, regardless of fault, save and except: 1) in the instance of a catastrophic occurrence (e.g., hurricane) that results in a declared state of emergency and that directly and substantially affects the Site Rehabilitation Contractor's operations at a site and results in unavoidable delay of the corrective action or 2) an unforeseen condition following financial award to which DHEC has been notified in writing by the Site Rehabilitation Contractor and as DHEC has approved in writing. In the event of a catastrophic occurrence or unforeseen condition on a specific site, DHEC shall determine the number of months reasonably necessary to extend the Site Incentive Period due solely to such catastrophic occurrence or unforeseen condition. Any amendments to the Site Incentive Period will be provided to the Owner/Operator in writing.

The parties anticipate that routine delays may be caused by or arise from any number of events during the course of corrective action, including, but not limited to: work performed, work deleted, supplemental agreements, delays, disruptions, differing site conditions, utility conflicts, design changes or defects, extra work, right-of-way issues, permitting issues, actions of suppliers, subcontractors, or other Contractors, actions by third parties, revision of the work scope by the Site Rehabilitation Contractor, weather, weekends, holidays, suspensions of the Site Rehabilitation Contractor's operations, or any other such events, forces or factors experienced in environmental work. Such delays or events, and their potential impacts on performance by the Site Rehabilitation Contractor are specifically contemplated and acknowledged by the Site Rehabilitation Contractor upon entering into this Active Corrective Action, and shall not affect the Site Incentive Period or incentives set forth in this Section. Further, any and all costs or impacts whatsoever incurred by the Site Rehabilitation Contractor to complete corrective action within the Site Incentive Period, whether successful or not, shall be the sole responsibility of the Site Rehabilitation Contractor in every instance.

The Site Rehabilitation Contractor shall have no rights under the Technical Specifications Package to make any claim arising out of this incentive provision except as is expressly set forth in this provision.

The Site Incentive Period for Corner Stop 5, 500 N Logan St., Gaffney, SC 29341, UST Permit 11894 is 18 months.

### III. SPECIFICATIONS FOR CORRECTIVE ACTION

### A. GENERAL SPECIFICATIONS

- 1. SUBMITTALS: All UST Site Rehabilitation Contractors must submit a completed Financial Approval Form. All submittals must be either hand-delivered or mailed in a sealed envelope to SCDHEC, UST Management Division, 2600 Bull Street, Columbia, SC 29201, ATTN: Debra Thoma. The envelope must be marked as a Financial Approval Form for Corner Stop 5, UST Permit 11894. The Form outlines an approach to achieve the payment milestones as set forth in Section II.A.9 (i.e., removal of measurable (>0.01') FPP and reduction of CoC to SSTLs) and contains the following elements:
  - a. A description of the proposed treatment method(s) or technology(ies) for corrective action.
  - b. The amount of time in months to meet the payment milestones, install verification wells, and remove or abandon all assessment and corrective action components.

- c. The total Corrective Action Cost (in U.S. dollars) to meet the payment milestones and to remove or abandon all assessment and corrective action components.
- 2. MINIMUM REQUIREMENTS: Corrective action will be considered complete when: 1) the CoC concentrations are verified to be at or below SSTLs in all wells and sampling points listed in the Appendix, in all verification wells, and at any point in the area of concern for two consecutive quarters; 2) all assessment and corrective action components (e.g., piping, wells, trenches, etc.) have been removed from the site or are properly abandoned; and 3) the facility and associated adjacent properties have been restored to the condition that existed prior to assessment and corrective action in accordance with Section III.B.13. See Section III.B.11 for the method of verification. Per R. 61-98, all site rehabilitation activities associated with a UST release must be performed by an SCDHEC-certified Class I Site Rehabilitation Contractor. The Site Rehabilitation Contractor will be required to adhere to all applicable portions of the UST QAPP and the Contractor's ACQAP. A copy of the UST QAPP is available at https://scdhec.gov/environment/land-waste/underground-storage-tanks/releaseassessment-clean/quality-assurance /. All CAPs and reports must be sealed by a Professional Engineer or Professional Geologist registered in the State of South Carolina. All engineering reports, drawings and plans must be sealed by a Professional Engineer registered in the State of South Carolina. All laboratory analysis for CoC must be performed by an SC-certified laboratory. All monitoring, verification, injection and/or extraction wells must be installed and abandoned by an SCcertified well driller. All applicable certification, training, permits, applications, and fees associated with well installation; injection, discharge, treatment, or transportation of groundwater, air, or soil; construction or operation of a corrective action system; and any other action requiring a permit are the responsibility of the Site Rehabilitation Contractor. Any required business or occupation license and occupational safety and health training (e.g., OSHA) as defined by the laws and regulations of the United States of America, the State of South Carolina, the county or city is also the responsibility of the Site Rehabilitation Contractor. The terms and conditions of all applicable permits will be met. Any contaminated soil or construction debris, contaminated water, and FPP must be properly transported and disposed of, or treated at, an approved facility with prior approval from DHEC. Any costs for utilities construction and service (electric, telephone, sewer, etc.) required by the corrective action are the responsibility of the Site Rehabilitation Contractor.

### **B. PERFORMANCE REQUIREMENTS**

- QAPP CONTRACTOR ADDENDA/SITE-SPECFIC WORK PLANS: The Site Rehabilitation Contractor must submit a UST QAPP Contactor Addendum or Site-Specific Work Plan for the Initial Monitoring Report within 15 days from the date of financial approval. The Addendum or Work Plan for the Initial Monitoring Report must be approved by DHEC prior to initiation of work at the site. A UST QAPP Contractor Addendum or Site-Specific Work Plan for corrective action must be submitted with the CAP. The Addendum or Work Plan action must be updated during the first quarter of each year or as needed until completion of corrective action.
- 2. CORRECTIVE ACTION PLAN: The Site Rehabilitation Contractor must complete and submit a detailed CAP and UST QAPP Contractor Addendum or Site-Specific Work Plan for corrective action within 30 days from receipt of a Notice to Proceed from DHEC for CAP Preparation. Copies of the CAP must be distributed in accordance with Section II.A.8. The CAP must define the method(s) and technology(ies) proposed to achieve corrective action goals in a manner that is consistent with the CACT submitted by the Site Rehabilitation Contractor. The corrective action method(s) or technology(ies) must be designed to prevent vapors from entering onsite or adjacent structures. It must be shown, by use of scientific models, computations, or discussion, how FPP will be removed and CoC

concentrations reduced by each method and technology proposed. Any assumptions used in a model will be listed or shown, as well as appropriate references. The use of existing monitoring well(s) for injection, extraction, or FPP recovery purposes is not allowed. Accordingly, the CAP may propose installation of additional injection, extraction, or compliance wells. General construction details will be included in the CAP (e.g. install 4 extraction wells, install 8 injection wells, excavate 3,000 cubic yards of impacted soils, etc.) as well as details of assessment and corrective action component abandonment and/or removal.

A corrective action timetable that includes demobilization and site restoration (Section III.B.12-14) will be provided by the Site Rehabilitation Contractor. As corrective action is required to be completed within 5 years from financial approval, the submitted timetable shall not exceed 5 years in any case. The timetable shall itemize when the Site Rehabilitation Contractor expects to meet the FPP removal, 60%, 90%, and 100% interim payment milestones. During corrective action implementation, this timetable may be adjusted (as approved in writing by DHEC) if circumstances beyond the control of the Site Rehabilitation Contractor arise. Any request for an extension beyond the 5-year time frame must be made in writing by the Owner/Operator and the CACT may be extended with a written no cost extension granted by DHEC. Any extension request or submittal of a revised timetable should include an updated CACT. If the Site Rehabilitation Contractor fails to meet the interim payment milestones in the proposed time frames, this Active Corrective Action may be cancelled, and the Owner/Operator will be held to the requirements in Section II.A.5.

DHEC will review the CAP and initiate a public notice period for a maximum of 30 days. The names and addresses of the owners of all impacted properties and all properties located adjacent to the impacted properties are provided in the Appendix. The Site Rehabilitation Contractor may be required to attend and provide input at one or more public meetings upon request by DHEC. Any CAP amendments and modifications resulting from the public notice must be submitted within 15 days of notification by DHEC. The CAP and any amendments or modifications must be sealed by a qualified Professional Geologist or Engineer registered in the State of South Carolina. The UST Owner/Operator and any other affected property owners will be consulted and will approve the location of the corrective action system. Any aboveground part of the system that is to remain onsite for longer than 30 contiguous days must be secured within a fenced area or building.

- 3. PERMIT APPLICATIONS: The Site Rehabilitation Contractor must complete and submit all applications for permits (injection, NPDES, BAQC modeling form, thermal treatment, construction, etc.) with the CAP to the appropriate DHEC program areas. All submitted applications must comply with the requirements of the respective permitting program. Any required permit changes or corrections will be submitted within 15 days of notification by DHEC.
- 4. INITIAL MONITORING REPORT: Prior to CAP preparation, the Site Rehabilitation Contractor must submit an Initial Monitoring Report to DHEC documenting CoC concentrations, FPP thicknesses, and potentiometric conditions in all wells and sampling points listed in the Appendix. The report will be due within 45 days after receipt of the UST QAPP Contractor Addendum or Site-Specific Work Plan approval from DHEC. The report should include color photographs with date stamp of the facility/site and surrounding properties to provide documentation of the condition of the facility/site prior to implementation of any corrective action activities. Copies of the Initial Monitoring Report must be distributed in accordance with Section II.A.8.

Naturally occurring conditions may cause FPP thicknesses and/or CoC concentrations to increase or decrease. For the purpose of this solicitation, the total FPP thickness or CoC concentration for all wells and sampling points listed in the Appendix may reasonably increase up to 150% or decrease as

much as 50%. If the total FPP thickness or CoC concentration in the wells and sampling points listed in the Appendix increases more than 150% percent based on initial gauging and sampling, or if measurable (>.01') FPP that has not been previously documented in any report is detected during the initial sampling event, the Site Rehabilitation Contractor may request in writing that financial approval be cancelled. If any of these conditions are identified during initial sampling, the Site Rehabilitation Contractor will notify DHEC within 2 days of identification and will submit written documentation within 5 days of notification requesting a decision from DHEC on continuance or discontinuance of the Active Corrective Action. If total COC or FP increase more than 150% or decrease more than 50% during the initial sampling event, sampling and analytical results of the Initial Monitoring Report will be verified by DHEC. The verification sampling event will be conducted by DHEC or DHEC's agent. Financial approval will be cancelled and the Site Rehabilitation Contractor will be reimbursed based on the following rate schedule if DHEC discontinues this Active Corrective Action:

Subcontract Costs*	Invoice + 12%
Personnel mobilization	\$423.00
Groundwater sample collection- purge	\$60.00 per well
Groundwater sample collection- no purge	\$28.00 per well
Groundwater sample collection- low flow	\$91.00 per well
Field blank	\$24.60
Gauging FPP	\$7.00 per well
Contaminated water disposal	\$0.56 per gallon
FPP disposal	\$0.50 per gallon
UST QAPP Contractor Addendum preparation	\$250.00
Site-Specific Work Plan preparation	\$150.00

Table 4.1 - Reimbursement Rate Schedule

If the total FPP thickness or CoC concentration in the wells and sampling points listed in the Appendix decreases more than 50% based on initial gauging and sampling, DHEC may cancel financial approval. The Site Rehabilitation Contractor will be notified of the cancellation by certified letter and must submit an invoice for the appropriate items listed in the rate schedule within 20 days from receipt of the letter. If financial approval is cancelled prior to the receipt of the Notice to Proceed for CAP preparation due to any of the conditions described in this Section, final payment will be made for work actually conducted in accordance with table 4.1 above.

5. CORRECTIVE ACTION PLAN IMPLEMENTATION: After the CAP, UST QAPP Contractor Addendum or Site-Specific Work Plan, and all permit applications are reviewed and approved in accordance with the UST QAPP and the Contractor's ACQAP, and R.61-92, Section 280.66, the DHEC UST Management Division will issue a Notice to Proceed with CAP implementation. CAP Implementation must not proceed until a written Notice to Proceed is received from the UST Management Division. The Site Rehabilitation Contractor will implement the CAP within 30 days of receipt of the Notice to Proceed and any required permit to construct. If the CAP is not implemented in 30 days, a penalty of \$100 per day will be assessed for each calendar day late unless the Site Rehabilitation Contractor obtains written approval from DHEC regarding a change in the implementation schedule. Any assessed penalty amounts will be deducted from the initial payment. If any problem with CAP implementation occurs, the Site Rehabilitation Contractor will notify DHEC within 24 hours of problem identification and will submit written documentation within 5 days of notification. Disruption to the normal

<sup>\*</sup> Includes laboratory, drilling, electrical, etc.

business at the site will be kept to a minimum. Any modification, relocation, disturbance, or destruction of physical structures or features as a result of CAP implementation must be approved in writing by the affected property owner prior to CAP implementation. Upon completion of any required construction, DHEC will inspect the corrective action system and issue a permit to operate. The Site Rehabilitation Contractor will, at all times, keep the site free from waste materials and rubbish related to corrective action and maintain the site in a neat and workmanlike condition for the duration of the corrective action. All contaminated soil and construction debris, contaminated water, and FPP generated on-site will be removed from the site promptly. Manifests documenting the proper disposal of contaminated soil and construction debris, contaminated water, and FPP must be included in the appropriate report. The Site Rehabilitation Contractor will repair and/or restore the site/facility to the condition that existed prior to CAP implementation and as documented by the photographs included in the Initial Monitoring Report in accordance with III.B.4. Any deviation in returning the site/facility to the condition that existed prior to CAP implementation must be documented in writing by the Site Rehabilitation Contractor and signed by the Owner/Operator and property owner. If the CAP has been implemented and physical treatment activities performed, the Owner/Operator will be required to complete the Active Corrective Action unless conditions outlined in Section II.A.11 are encountered.

Implementation of the CAP is not authorized until the Site Rehabilitation Contractor receives a Notice to Proceed from DHEC. If unauthorized implementation occurs, DHEC will not reimburse related costs incurred by the Site Rehabilitation Contractor from the SUPERB Account, and the Corrective Action Cost will be reduced by the amount of the incurred costs. If DHEC agrees with early implementation to better protect human health in an emergency and provides approval in writing, early implementation without any reduction to the Corrective Action Cost will be authorized.

A CAP Implementation Report will be due 60 days from receipt of the Notice to Proceed from DHEC and shall include a description of work sufficient to document CAP implementation activities and the associated dates of work.

- 6. PROPERTY ACCESS: The Site Rehabilitation Contractor will secure access to the site and adjacent properties to gauge and sample wells and sampling points, and to install any corrective action components, as required. The Site Rehabilitation Contractor will be responsible for corrective action components installed on adjacent properties. Costs to repair or replace components of the corrective action system damaged due to the actions of adjacent property owners cannot be paid by the SUPERB Account.
- 7. START-UP: The Site Rehabilitation Contractor will initiate corrective action within 15 days of receipt of a permit to operate, if required. Corrective action as defined in the CAP will begin upon start-up. NOTE: The application of corrective action technologies or natural fluctuations in the water table can mobilize FPP and cause possible appearance of FPP and/or elevated CoC concentrations in non-SSTL wells and sampling points.
- 8. REPORTING: The Site Rehabilitation Contractor must complete and submit a CAP Implementation Report within 60 days of receipt of the Notice to Proceed. The Site Rehabilitation Contractor must also complete and submit a Corrective Action System Evaluation (CASE) report on a semi-annual schedule. The CAP Implementation Report and CASE reports will be distributed in accordance with Section II.A.8. The first CASE report is due within 120 days of the CAP Implementation. CASE reports must be submitted regardless of the status of corrective action activities.

All wells and sampling points listed in the Appendix will be sampled on a semi-annual schedule (see Section III.B.9 for sampling details) following submittal of the CAP Implementation Report.

CASE reports must include, at a minimum, all items stipulated in the Documents and Records section and Active Site Rehabilitation Procedures section of the UST QAPP and must include a summary of all Corrective Action activities conducted to date and during the last reporting period. CASE reports must also include any additional data required by permits (e.g., air analyses, wastewater effluent analyses, etc.). The Site Rehabilitation Contractor will be provided with the proper report forms and reporting format prior to CAP Implementation. DHEC will notify the Site Rehabilitation Contractor regarding any revisions to the forms or format 60 days prior to the due date for the next CASE report.

- 9. SAMPLING: The Site Rehabilitation Contractor must collect water samples from all wells and sampling points listed in the Appendix on a semi-annual schedule. Do not sample wells and sampling points containing measurable (>0.01') FPP. If measurable FPP is present, the thickness of product and depth to groundwater must be recorded to the nearest 0.01'. The sampling will be conducted in accordance with applicable portions of the UST QAPP and the Contractor's ACQAP. Additional samples (air, groundwater, effluent, soil) required by permits must be collected in accordance with established Quality Assurance/Quality Control protocol and submitted to an SC-certified laboratory for analysis. The samples will be analyzed for parameters stipulated in the permits. Sampling and analytical data for each sample (e.g., field sampling logs, chain of custody forms, certificates of analysis, lab certification number) will be included in the CASE report.
- 10. DISPOSAL: The Site Rehabilitation Contractor must properly dispose of all contaminated water, contaminated soil, and FPP generated during corrective action. The Owner/Operator of the UST facility will be considered the generator. Treatment and disposal must be conducted at a DHEC-approved facility, and must be documented in the CASE reports.
- 11. QUALITY ASSURANCE & VERIFICATION: If the Site Rehabilitation Contractor anticipates that a payment milestone has been achieved, the Site Rehabilitation Contractor must conduct a gauging or sampling event and submit the finalized gauging data or lab report electronically and via mail to DHEC for review. DHEC will then schedule a gauging event or issue a directive for verification sampling and schedule an On-Site Field Audit. DHEC must be allowed at least 15 calendar days in order to schedule a time to conduct an On-Site Field Audit or verification of the gauging or sampling event. Furthermore, the Site Rehabilitation Contractor will be allowed one verification attempt during each reporting period for the FPP removal, 60%, 90%, and 100%payment milestones.

Once gauging data indicates that FPP has been removed, the Site Rehabilitation Contractor must provide DHEC with documentation of the gauging event to show that the FPP removal payment milestone has been achieved. DHEC will then conduct a gauging event as soon as possible to verify achievement of the FPP removal payment milestone. The Site Rehabilitation Contractor will be notified of the date and time DHEC plans to conduct the verification gauging event.

DHEC will require the Site Rehabilitation Contractor to submit a finalized lab report documenting the achievement of the 60% and 90% payment milestones. The Site Rehabilitation Contractor will then be required to conduct verification sampling to verify achievement of the first (60%) and second (90%) interim CoC concentration reduction payment milestones. During the 60% and 90% verification sampling events DHEC must conduct an On-Site Field Audit to ensure adherence with the UST QAPP.

Once sampling data indicate 100% CoC concentration reduction, the Site Rehabilitation Contractor must completely suspend corrective action for 30 days, provide notification to DHEC with the submission, electronically and via mail, of a finalized lab report to DHEC documenting the sampling results. After 30 days, the Site Rehabilitation Contractor will sample all wells and sampling points listed in the Appendix again to verify that the final (100%) CoC concentration reduction payment milestone has been achieved and maintained, and submit a finalized lab report to DHEC documenting the results of this 30 day post system shut off sampling event. If the payment milestone is achieved and maintained, the date of the 30-day post system shut off sampling event will be considered the start of the two-quarter, post-corrective action verification period. The Site Rehabilitation Contractor will conduct quarterly sampling of all wells and sampling points listed in the Appendix and all verification wells for two quarters. All sampling, analytical methods and reporting limits should be in accordance with Section III.B.9, the Site Rehabilitation Contractor's ACQAP, and the UST QAPP.

The 100% CoC reduction payment milestone will require verification sampling to be conducted by DHEC's Agent at the end of the two-quarter, post-corrective action verification period to confirm that the 100% payment milestone has been maintained. In addition to the verification samples, DHEC may provide up to three standards or prepared blanks for the Site Rehabilitation Contractor's laboratory to analyze. Analytical data sets from the Site Rehabilitation Contractor's laboratory and DHEC's laboratory will be compared. In the event of substantial variance (more than 15%) between the sets, a second verification sampling event will be conducted with the Site Rehabilitation Contractor. If the variance persists, all data sets and associated quality assurance/quality control data will be provided to Laboratory Certification to determine the cause of the variance. The Director of the UST Management Division will solicit input from Laboratory Certification, the UST Section Manager, the UST Project Manager, and the Site Rehabilitation Contractor, and render a final decision as to which data set will be used for verification. The Site Rehabilitation Contractor will be provided a written record of the decision.

If sampling results show that the final (100%) CoC concentration reduction payment milestone has not been maintained, and/or CoC concentrations exceed SSTLs in any verification well, corrective action must be resumed. DHEC may require the Site Rehabilitation Contractor to propose a revised corrective action strategy and timetable to achieve and maintain the payment milestone. The strategy may require modification of the existing corrective action system. The post-corrective action period will be suspended and corrective action will continue until the final (100%) CoC concentration reduction payment milestone is again achieved. The Site Rehabilitation Contractor will again suspend corrective action and sample all wells and sampling points after 30 days. If the payment milestone is achieved and maintained, a new post-corrective action verification period will begin. The aforementioned cycle of activity must be repeated until CoC concentrations remain at or below SSTLs in all wells and sampling points listed in the Appendix and in all verification wells for 2 consecutive quarters.

DHEC may require installation of (five) verification well(s) during the post-corrective action verification period at designated locations and depths. Costs for the verification wells will be considered part of the Corrective Action Cost. SSTLs for the verification wells will be provided by DHEC.

12. DEMOBILIZATION: The Site Rehabilitation Contractor will disassemble and remove the corrective action system and associated components installed as part of this Active Corrective Action including piping, injection or extraction wells, or utilities from the site within 60 days of a written Notice to Proceed received from the UST Management Division confirming that the 100% CoC concentration

reduction payment milestone has been achieved and maintained for 2 consecutive quarters as described in Section III.B.11. Abandonment will be in accordance with the South Carolina Well Standards and Regulations R. 61-71, the UST QAPP, and the Site Rehabilitation Contractor's ACQAP, and accepted industry standards for abandonment of trenches and piping/utility runs. Abandonment of any corrective action system, monitoring well, recovery well, remediation well, etc., may not proceed until a written Abandonment Directive is issued by the UST Management Division. Disruption to the UST Owner/Operator's or property owner's normal business will be kept to a minimum.

- 13. SITE RESTORATION: The Site Rehabilitation Contractor must remove or properly abandon all preexisting assessment and corrective action components (piping, monitoring wells, injection and/or extraction wells, trenches, etc.) within 60 days of a written Notice to Proceed received from the UST Management Division that the 100% CoC reduction payment milestone has been achieved and maintained for 2 consecutive quarters as described in Section III.B.11 Abandonment will be in accordance with the South Carolina Well Standards and Regulations R. 61-71, the UST QAPP, and the Site Rehabilitation Contractor's ACQAP, and accepted industry standards for abandonment of trenches and piping/utility runs. Abandonment of any corrective action system, monitoring well, recovery well, remediation well, etc., may not proceed until a written Abandonment Directive is issued by the UST Management Division. Disruption to the Owner/Operator's or property owner's business must be kept to a minimum. The Site Rehabilitation Contractor must provide DHEC with documentation of the abandonment and disposal of any remaining contaminated soil, contaminated groundwater, and FPP. Unless otherwise directed by DHEC, the Site Rehabilitation Contractor will restore the site and adjacent properties to the condition that existed prior to assessment and corrective action (e.g., repaying, reseeding, etc.) as documented by the photographs included in the Initial Monitoring Report or other written documentation detailing a variance from the conditions documented by the photographs. Neither DHEC nor the SUPERB Account will be liable for any damages caused by the Site Rehabilitation Contractor. As required by Section IV.A.4c of the SUPERB Site Rehabilitation and Fund Access Regulations R.61-98, the Site Rehabilitation Contractor shall be required to indemnify the property owner, UST Owner/Operator and the State of South Carolina from and against all claims, damages, losses and expenses arising out of or resulting from activity conducted by the Site Rehabilitation Contractor, its agents, employees or subcontractors. Under no circumstances will payment for Site Restoration exceed 5% of the Corrective Action Cost.
- 14. COMPLETION NOTICE: Written notice must be provided to DHEC at least 2 weeks prior to completion of site restoration. This will allow DHEC and the Site Rehabilitation Contractor time to jointly inspect the site and adjacent properties, and compile a list of tasks to be finished. Task items may include, but are not limited to, well abandonment, pavement repair, debris removal, etc. Site restoration will be complete once all the tasks are finished, the site passes a final inspection by DHEC, and DHEC issues written notice that the corrective action is complete.

### IV. FINANCIAL APPROVAL FORM

### A. ACCEPTANCE and DELIVERY STATEMENT

urpose of this submittal and possible acce rstands the nature of the release(s) and the nd this solicitation. Any quantities listed in ges to those quantities or to the listed in the l	specified at the price set forth for the site as stated below. Feptance of financial approval, I certify that this company se geologic conditions at the site as documented in the technin the corrective action method(s) below are estimates a method(s) will not affect the financial approval amount. Stands that acceptance is based on total cost to treat the area
UST Site Rehabilitation Contractor (Print)	UST Site Rehabilitation Contractor Certification #
Registered Professional Name (Print)	Registered Professional Signature (required)
P.G. P.E. (check appropriate box)	Professional Certification #
Permit 11894:	ons for Corner Stop 5, 500 N Logan St., Gaffney, SC 29341,
Permit 11894:  1. State and briefly describe the correct	ons for Corner Stop 5, 500 N Logan St., Gaffney, SC 29341, tive action method(s) or technology(ies) that will be discussed ent milestones in 5 years, should financial approval occur. At
Permit 11894:  1. State and briefly describe the correct detail in the CAP to achieve all payments.	tive action method(s) or technology(ies) that will be discussed
Permit 11894:  1. State and briefly describe the correct detail in the CAP to achieve all payments.	tive action method(s) or technology(ies) that will be discussed
Permit 11894:  1. State and briefly describe the correct detail in the CAP to achieve all payments.	tive action method(s) or technology(ies) that will be discussed
Permit 11894:  1. State and briefly describe the correct detail in the CAP to achieve all payments.	tive action method(s) or technology(ies) that will be discussed
Permit 11894:  1. State and briefly describe the correct detail in the CAP to achieve all payments.	tive action method(s) or technology(ies) that will be discussed

duration of the permitted technology applied, to achieve all payment milestones in order to treat the

### SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

area of concern shown in the Appendix such that the FPP thicknesses do not exceed 0.01' and CoC concentrations do not exceed the SSTLs at any point in the area of concern; complete all associated monitoring and post-corrective action verification; prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon or remove all assessment and corrective action components; and complete other items outlined in this solicitation.

3.	Please provide how the corrective action costs stated in item #2 will be allocated for the corrective action activities listed in item #1 to include, but not limited to, sampling/analyses over the entire duration of the contract, corrective action system installation, site restoration, etc. Attach an additional sheet if necessary.
_	
_	
_	
_	
re	the CACT, in months, to achieve all payment milestones from the date of financial approval until the fina prective action payment milestones have been achieved and maintained for 2 consecutive quarters is months. All activities must be completed within 5 years of the financial approval date. Any equest for an extension beyond the 5-year time frame must be made in writing by the Owner/Operator and the CACT may be extended with a written no cost extension granted by DHEC.

# **Appendix**

# **Distribution List for Plans and Reports**

	Contact Name	Contact Address	Tax Map #
1.	JPS Corner Stop Inc.	500 N Logan St., Gaffney, SC 29341	099-03-00-011.002
2.	Pramukth Inc.	108 Stacy Dr., Gaffney, SC 29341	099-03-00-011.002
3.	Peter Koehler	590 Aldrich Rd., Chesnee, SC 29323	099-03-00-011.001
4.	The Salvation Army	PO Box 184, Gaffney, SC 29342	099-03-00-008.000
5.	Cherokee Farm Bureau	221 W Robinson St., Gaffney, SC 29341	099-03-00-008.001
6.	864 Investments LLC.	234 Tuxedo Ln., Greer, SC 29651	099-02-00-119.000
7.	Judith Ruppe	1505 Cherokee Ave., Gaffney, SC 29340	099-03-00-013.000
8.	City of Gaffney	PO Box 2109, Gaffney, SC 29342	099-03-00-011.000
9.	Rupalben & Harshad Patel	864 Sunny Slope Dr., Cowpens, SC 29330	099-03-00-007.000
			099-03-00-005.001
10.	Donald Brock	154 Hidden Acres Dr., Gaffney, SC 29341	099-03-00-006.000
11.	W A Randolph	138 Estes Rd., Gaffney, SC 29341	099-02-00-059.000
			099-02-00-058.000
12.	Donald Hinton Jr	PO Box 637, Gaffney, SC 29342	099-02-00-118.001
13.	Gaffney Indoor Self Storage	320 Last Raid Ln., Swoope, VA 24479	099-02-00-121.000
			099-02-00-121.000
			099-02-00-122.000
14.	Mullis Evelyn	PO Box 1044, Gaffney, SC 29342	099-02-00-117.000
15.	First Piedmont Federal SLA	PO Box 1900, Gaffney, SC 29342	099-02-00-123.001
			099-03-00-009.000
16.	Shalom Christian Fellowship	PO Box 1856, Gaffney, SC 29342	099-02-00-060.000

<sup>\*</sup>Information is subject to change due to sale or other exchange of property

# **Adjacent Facilities**

	Facility Name	Facility Address	UST Permit #
1.	Cherokee Food Mart 2	307 W Frederick St., Gaffney, SC 29342	09997

# Dissolved CoC Concentrations during Groundwater Sampling/Gauging event conducted on 9/19/18

			,								}					
	Benzene	Toluene	Ethylbenzene	Xylenes	MtBE	Naphthalene	1,2 DCA	EDB	TAA	TAME	ETBA	TBA	TBF	DIPE	Ethanol	ETBE
MW-1							FP 1.21	1					I			
MW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<1.0	<20	<5.0	<1.0	<100	<1.0
MW-3				,			FP 0.28									
MW-4	5200	26000	3500	19000	<500	1000	<500	47	<10000	<5000	<10000	<10000	<2500	<500	<50000	<500
MW-5	12000	39000	3300	17000	<500	1100	<500	240	<10000	<5000	<10000	<10000	<2500	<500	<50000	<500
9-MM	3.2	<1.0	<1.0	4.1	2	1.2	19	0.16	<20	<10	<20	<20	<5.0	1.1	<100	<1.0
MW-7	7700	20000	2000	11000	<500	650	1800	480	33000	<5000	<10000	<10000	<2500	\$500	<50000	<500
MW-8	230	15000	2500	14000	<100	750	<100	0.25	<100	<1000	<2000	<2000	<500	×100	<100001>	<100
MW-9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0 <1.0	<100	<1.0
MW-10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	41.0	<100	41.0
MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	41.0	<100	<1.0
MW-15	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	02>	<20	<5.0	41.0	<100	41.0
MW-17	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<\$.0	41.0	<100	<1.0
MW-19	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	41.0	<100	¢1.0
MW-20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	°20	<20	<5.0	41.0	<100	<1.0
MW-21	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0 ^1.0
MW-22	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-D1	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<0.019	<20	<10	<20 ×20	<20	<5.0	<1.0	<100	<1.0
MW-D2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.019	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-D3	210	<5.0	<5.0	36	39	14	27	0.33	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
MW-D4	<1.0	<1.0	<1.0	<1.0	18	<1.0	3.4	<0.019	<20	<10	<20	<20	<5.0	0.1>	<100	<1.0
*Coc conce	antrations	and Man no	*Col concentrations in un hassad on 0/10/10	- continue	1				:							

<sup>\*</sup>CoC concentrations in µg/L based on 9/19/18 sampling event. CoC concentrations may vary due to seasonal fluctuations in the groundwater.

Note: For welfs that contain FP, the intial values in those wells will be set as the sampling results from the first sampling event when FP is removed.

<sup>\*</sup>Free Product Thicknesses are in feet

# Groundwater SSTLs (μg/L)

	Benzene	Toluene	Ethylbenzene	Xylene	MtBE	Naphthalene	1,2 DCA	EDB	TAA
MW-1	372	<u>26,540</u>	3,700	21,680	4,774	327	3,700	20.04	20,100,108
MW-2	1	1	1	1	1	1	1	0.02	20
MW-3	1,485	<u>26,540</u>	3,700	21,680	22,161	755	3,700	136.33	35,900,000
MW-4	714	26,000	3,500	19,000	500	485	500	47.00	10,000
MW-5	401	39,000	3,300	17,000	500	343	500	22.29	10,000
MW-6	3	1	1	4	2	1	19	0.16	20
MW-7	137	20,000	2,000	11,000	500	179	1,681	5.03	33,000
MW-8	230	15,000	2,500	14,000	100	343	100	0.25	100
MW-18	1	1	1	1	1	1	1	0.02	20
MW-19	1	1	1	1	1	1	1	0.02	20
MW-20	1	1	1	1	1	1	1	0.02	20
MW-21	1	1	1	1	1	1	1	0.02	20
D-3	74	5	5	36	39	14	27	0.33	20
D-4	1	1	1	1	18	1	3	0.02	20

Italic: Laboratory analysis is less than calculated SSTL -> SSTL is set to laboratory analysis

Bold: Laboratory analysis is below reporting limit --> SSTL is set to reporting limit Underline: Calculated SSTL is greater than solubility limits --> SSTL is set to solubility limit Corner Stop 5, UST Permit #11894 Cherokee County

## **Free Product SSTLs**

Monitoring Well	Free Product Thickness
MW-1	0.01
MW-3	0.01

<sup>\*</sup>Free Product Thickness SSTLs are in feet

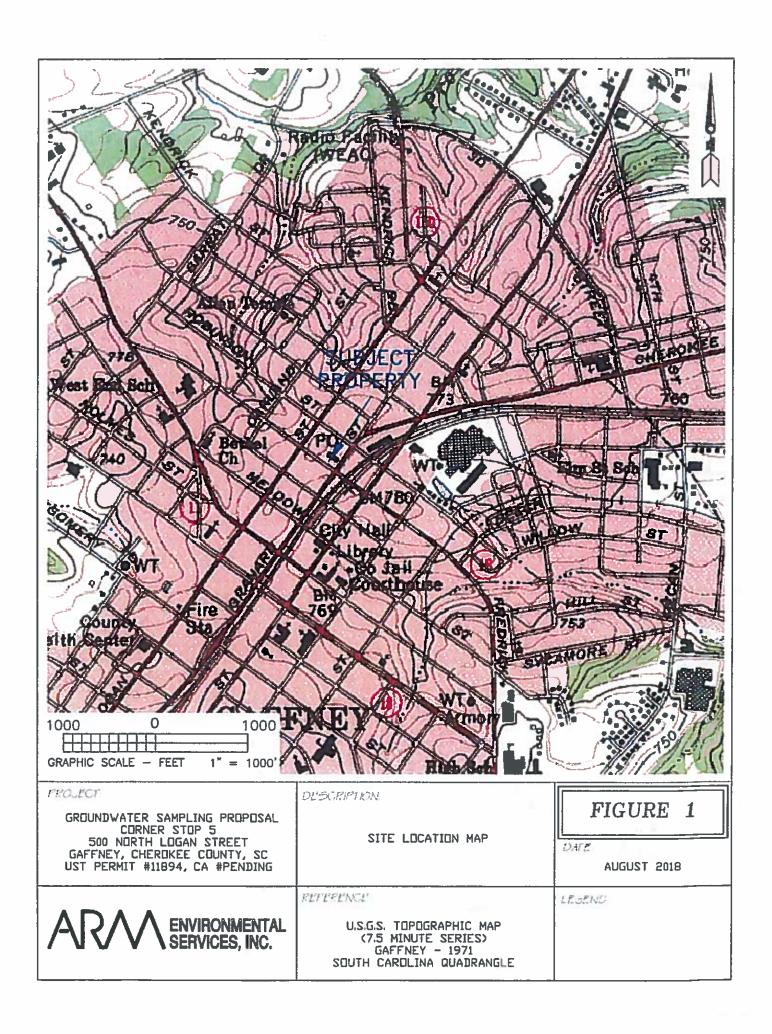
### **Analytical Parameters**

Analyte	<b>Analytical Method</b>	Reporting Limit
BTEX	8260B	5 μg/L
MTBE	8260B	5 μg/L
Napthalene	8260B	5 μg/L
1,2-DCA	8260B	5 μg/L
EDB	8011	0.02 µg/t.
TAA	8260B	100 μg/L

### **Verification Wells**

Five verification well(s) may be installed during the post-corrective action verification period at locations designated by the UST Program. Costs for the well installation(s) are considered part of the approved Corrective Action Cost. The UST Program will calculate SSTLs for the verification well(s) and provide data to the contractor in writing. During the verification period, all wells must be sampled for the parameters listed in the Analytical Parameters Table as well as the following parameters:

Analyte	<b>Analytical Method</b>	Reporting Limit
TAME	8260B	10 μg/L
ETBA	8260B	100 μg/L
TBA	8260B	100 μg/L
DIPE	8260B	10 μg/L
Ethanol	8260B	1000 μg/L
ETBE	8260B	100 μg/L
TBF	8260B	100 μg/L
Dissolved Oxygen	SM4500-O G	1000 μg/L
Ferrous Iron	SM3500-Fe D	10 μg/L
Methane	Kerr Method	10000 μg/L
Nitrate	9056/9210	100 μg/L
Sulfate	9038/9056	1000 μg/L



A)=th of care?  - HUNICIPAL VATER  - SANITARY SEVER  - HATURAL GAS	FIGURE 2	DAYEL GOTÜBER PO10	ADTES   A = MONTORING VELL
1 LEGS.	DESCRITION	SITE BASE MAP	REPRENCE
ATION  WW-D3  WW-D3  WW-19  SALVANTION  WW-19	GROUNDWATER SAMPLING ASSESSMENT CORNERS STOP #5	\$00 NORTH LICAN STREET GAFTNEY, CHEROKEE COUNTY, SC UST PERMIT #11894, CA #57800	ARM ENVIRONMENTAL. SERVICES, INC.
MW-14 A SALVATION SALVATIO	1000	NW-9 FINANCE	7.7
45.6 MW-15 MW-15 MW-15 MW-15 MW-15 MW-15 MW-13 MW-13 MW-13 MW-13 MW-15 MW-13 MW-15 M	AMW-10 CONC.		Rate Transferred T
Super Color	>		